

REMARKS

Claims 1, 3-24, and 26 are currently pending. Claims 2, 25 and 27-53 are cancelled without prejudice. Claims 1, 3, 18, and 26 are currently amended. No new matter has been added.

Independent claim 1 has been amended to incorporate all of the limitations of claim 2, and the angular range “from about 50 to about 70 degrees” of dependent claim 3. Claim 1 has also been amended to correct a typographical error.

Independent claim 18 has been amended to incorporate all the limitations of dependent claim 25, and the angular range “from about 50 to about 70 degrees” of dependent claim 26.

Claims 3 and 26 have been amended, and claims 2 and 25 are cancelled without prejudice in light of the amendments made to independent claims 1 and 18, respectively.

No new matter has been added by these amendments.

Rejections under § 102(b)

Claims 1, 2, 4, 8-11, 16, and 17 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,888,227 to Cottle (“Cottle”). These rejections should be withdrawn.

Independent claim 1 recites an inner side region and bone engaging portions wherein “the inner side region is angled with respect to each of the bone engaging portions at an angle ranging from about 50 to about 70 degrees.” It is respectfully submitted that Cottle does not disclose or suggest an inner side region and bone engaging portions wherein the inner side region is angled with respect to each of the bone engaging portions *at an angle ranging from about 50 to about 70 degrees*. In fact, Cottle does not disclose specific angles at all. Accordingly, Cottle fails to teach each and every limitation of claim 1, and therefore Applicants submit that this rejection should be withdrawn. As claims 4, 8-11, 16, and 17 depend from independent claim 1, the rejection of these claims should similarly be withdrawn, for at least this reason.

Rejections under § 102(e)

Claims 1, 2, 4, 5, 7-9, and 12-25 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,277,149 to Boyle et al. (“Boyle”). These rejections should be withdrawn.

Independent claims 1 and 18 recite an inner side region and bone engaging portions wherein “the inner side region is angled with respect to each of the bone engaging portions at an angle ranging from about 50 to about 70 degrees.” It is respectfully submitted that Boyle does not disclose or suggest an inner side region and bone engaging portions wherein the inner side region is angled with respect to each of the bone engaging portions *at an angle ranging from about 50 to about 70 degrees*. Applicants also respectfully point out that Examiner agrees, stating in the pending office action, page 4, third paragraph: “Boyle et al. disclose the claimed invention except for the angle ranging from about 50 to about 70 degrees.” Indeed, Boyle does not disclose specific angles at all. Accordingly, Boyle fails to teach each and every limitation of claims 1 and 18, and therefore Applicants submit that these rejections should be withdrawn. As claims 4, 5, 7-9, and 12-17 depend from independent claim 1, and claims 19-24 depend from independent claim 18, the rejection of these claims should similarly be withdrawn, for at least this reason.

Rejections under § 103(a)

Claims 3, 6, and 26 were rejected under 35 U.S.C. 103(a) as being unpatentable over Boyle. These rejections should be withdrawn.

As discussed above, and Examiner agrees, Boyle does not disclose or teach an angle of 50 to 70 degrees between an inner side region and either of two bone-engaging portions, nor does Boyle teach or describe any specific angles. Boyle is directed to an intervertebral implant. As is well known in the art, the angle between an adjacent pair of human vertebra, within which the implant of Boyle is designed to fit, ranges from about 4 degrees to about 14 degrees. Boyle accordingly fails to provide motivation or suggestion for modification of this angle to the much larger angular range (at least 40 degrees¹) recited in independent claims 1 and 18.² As a lead angle of at least 40 degrees is unsuitable for intervertebral implantation, there is no teaching or motivation to modify Boyle to create an implant with a lead angle of at least 40 degrees for any purpose. Accordingly, Boyle fails to teach, describe, or suggest each and every limitation of claims 1 and 18. As claims 3 and 6 depend from independent claim 1, and claim 26 depends from independent claim 18, the rejection of these claims should similarly be withdrawn, for at least this reason.

¹ Referring to Fig. 5B of the specification as-filed, the lead angle between ends 46A and 46B, corresponding to the intervertebral angle of Boyle, is: $2 \times (90^\circ - TA)$. (This is assuming TA is the same for both ends 46A and 46B). Therefore, if TA is 70 degrees, the angle between ends 46A and 46B is 40 degrees. If TA is 50 degrees, the angle between ends 46A and 46B is 80 degrees.

² As discussed above, the angular range limitation of dependent claims 3 and 26 have been added to independent claims 1 and 18, respectively.

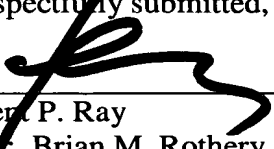
CONCLUSION

It is believed that claims 1, 3-24, and 26 are in condition for allowance. Further, all amendments made herewith are based on combining previously examined claims of this application, thus requiring no further searching or examination. Finally, no new matter has been added.

No fee is believed to be due for this response. Should any fee(s) be due, please charge such fee(s) to Jones Day Account No. 503013.

Respectfully submitted,

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Brent P. Ray
For: Brian M. Rothery
(Reg. No. 35,340)

54,390
(Reg. No.)

JONES DAY
222 East 41st Street
New York, New York 10017
(212) 326-3939